



SURFACE MOUNT LED

審查	作成
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1.ELEMENT APPEARANCE

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Model No.	Material	Lighting Color	Resin Color
RT-190ET	AlGaAs	Non-Visible	Water Clear

2.ABSOLUTE MAXIMUM RATINGS AT Ta=25°C

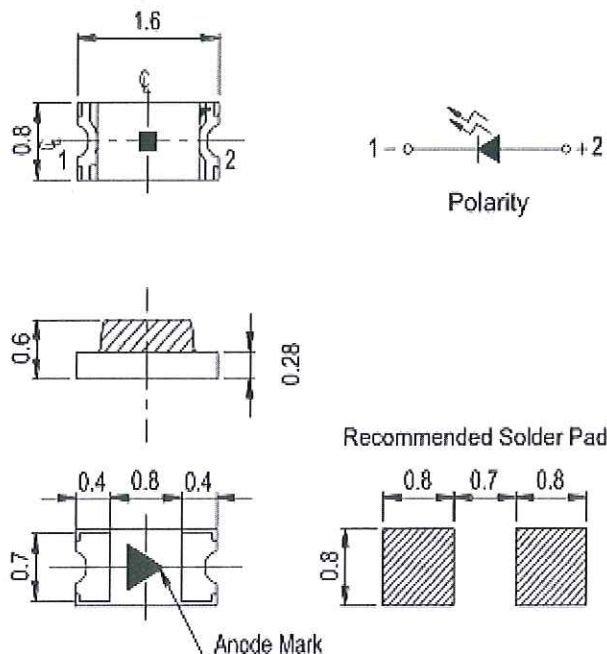
Characteristic	Symbol	Rating	Unit
Forward direct current	IFM	100	mA
Reverse voltage	VRM	5	V
Operating temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-40 to +85	°C
Power dissipation	Pd	170	mW
Peak Forward Current (Duty 1/10 @1KHz)	IFP	1	A

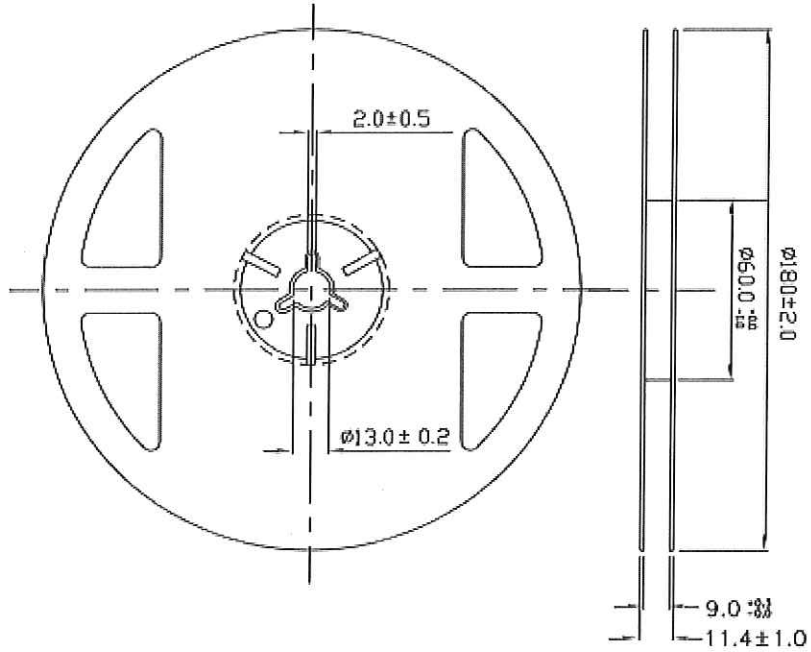
3.ELECTRO-OPTICAL CHARACTERISTICS AT Ta=25°C

Characteristic	Symbol	Condition	Min.	Typ.	Max.	Unit
Radiant intensity	Ie	IF=20mA	BIN.A1	1.5	2.0	mW/sr
			BIN. A2	2.0	3.0	
			BIN. A3	3.0	4.0	
Forward voltage	VF	IF=20mA	1.20		1.70	V
Reverse current	IR	VR=5V			10	μA
Peak emission wavelength	λp	IF=20mA		850		nm
Viewing angle	2θ 1/2	IF=20mA		120		deg.

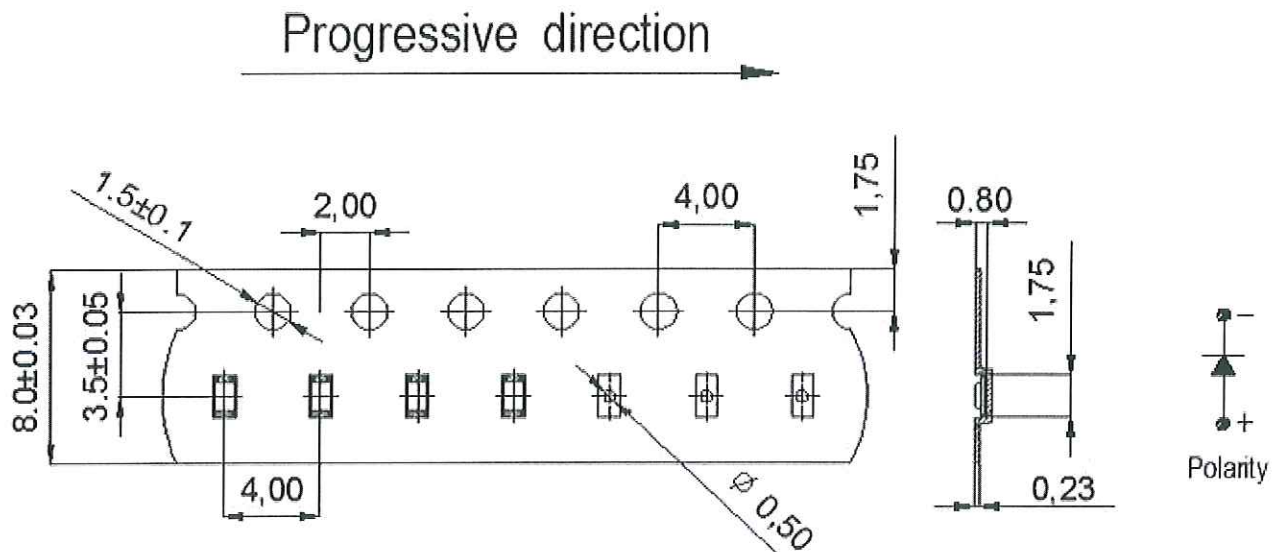
- ※ Forward voltage Measurement allowance is ±0.05V
- ※ Luminous Intensity Measurement allowance is ±15%
- ※ Dominant wavelength Measurement allowance is ±0.5nm

4.DIMENSIONS UNIT : m/m TOLERANCE : ± 0.25

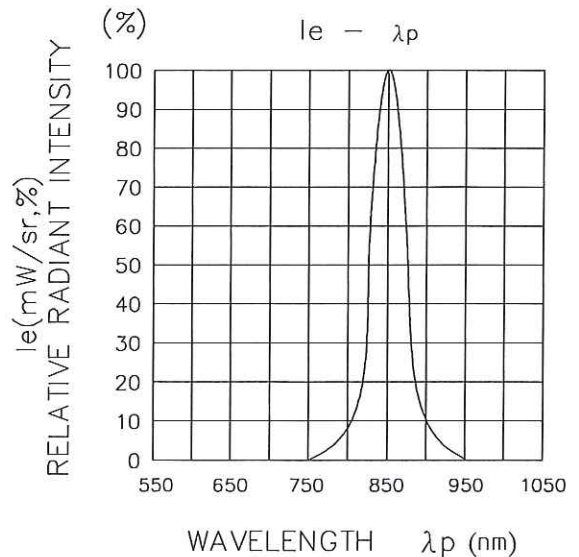
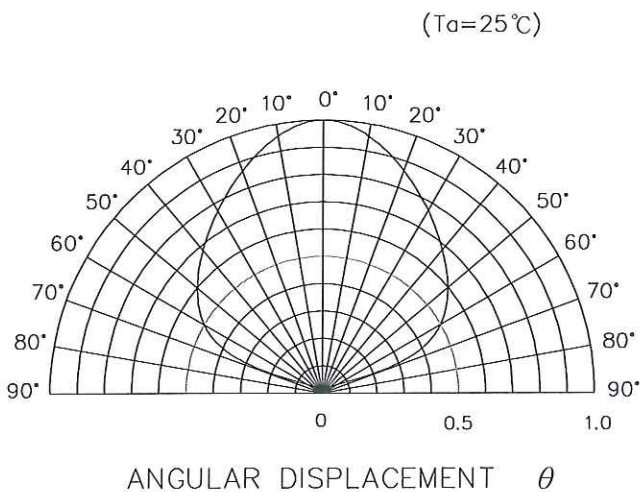
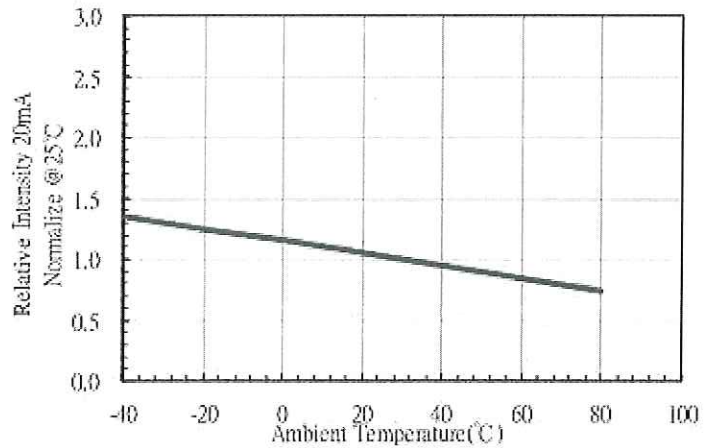
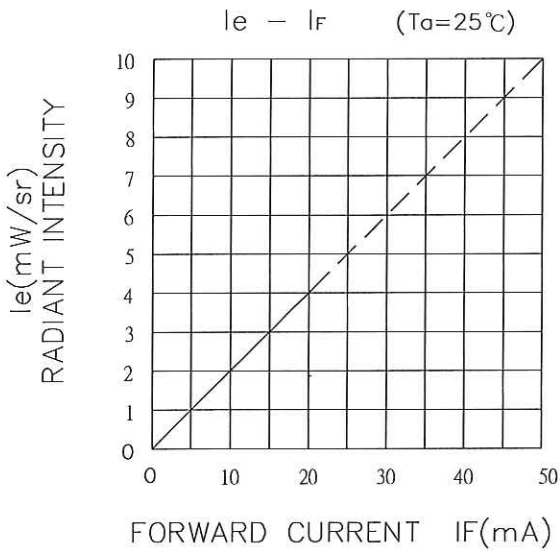
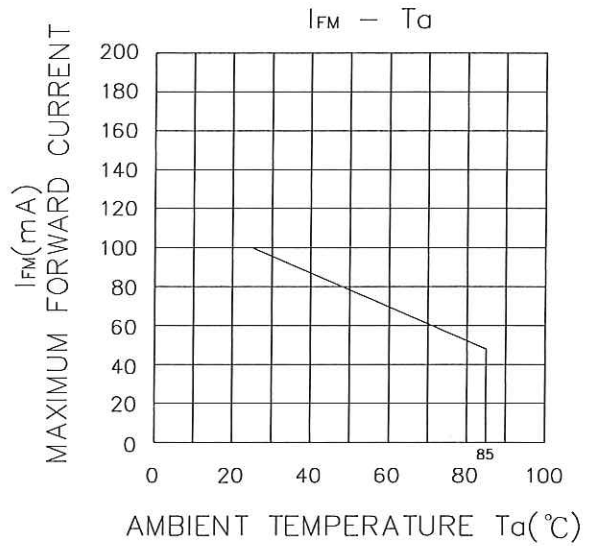
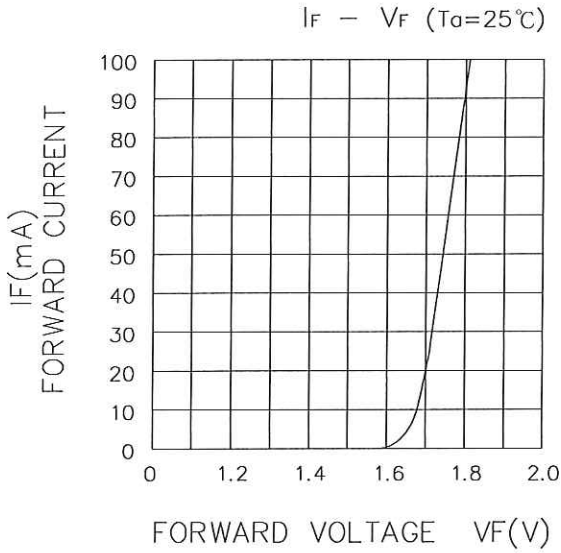




Note:
Tolerances unless mentioned ± 0.1 mm, Unit = mm.



Note:
1. Tolerance unless mentioned is ± 0.1 mm, Unit = mm.
2. Minimum packing amount is 1000 pcs per reel.



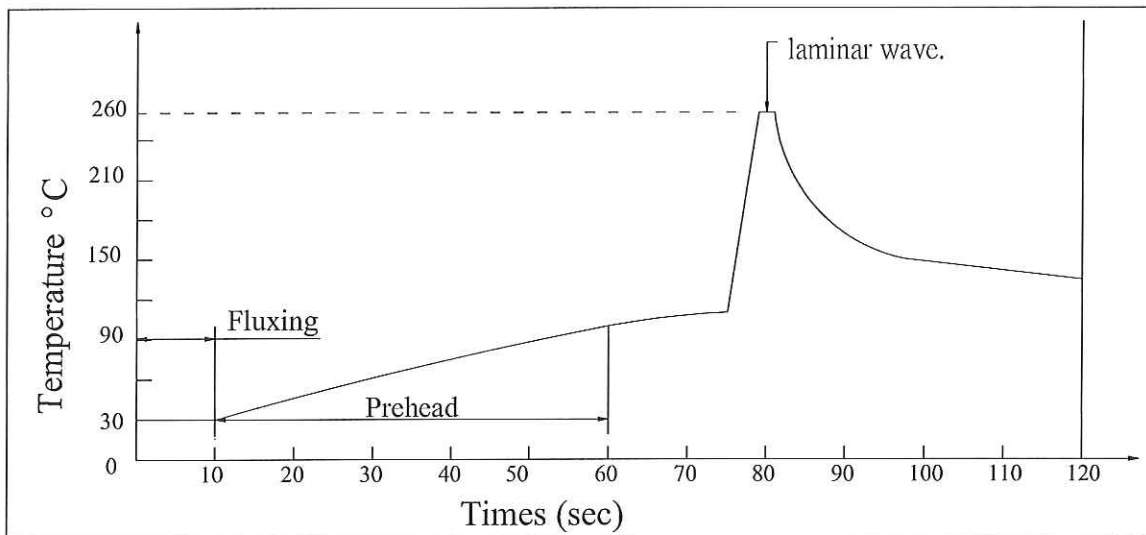


Soldering Profile

Compliant with the following condition :

- (1) Leaded quantity of product below 100 ppm
- (2) Lead-free process

Shape	Lead Frame Type
Hand soldering	1.Temp.at tip of iron : 300 °C max.(30W max.) 2.Soldering time : 3 sec max. 3.Distance : 3 mm MIN (from solder joint to case)
DIP soldering	1.Preheat temp : 100 °C max , 60 sec max. 2.Bath temp : 260 °C max. 3.Bath time : 3 sec max. 4.Distance : 3 mm MIN (From solder joint to case)
Recommended soldering profile	1.Preheat temp. : 100 °C , 50 sec max. 2.Peak temp. : 260 °C max. 3.Peak time : 3 sec max. 4.Duration above: 200°C , 3 sec max.



SMD Type		
Profile Feature	Solder : Lead-Free	Solder : Low Lead-Free
Preheat temp	150-180 °C , 4°C/sec max. 120 sec max.	130-170 °C , 4°C/sec max. 120 sec max.
Peak temp	245 °C max. , 5 sec max.	213 °C max. , 25 sec max.
Duration above	217 °C , 60 sec max.	200 °C , 40 sec max.

